

REMARKS

Claims 10-20 are pending. Claims 10-20 stand rejected. Claim 10 has been amended to incorporate the limitation of former claim 15, now canceled. Claim 10 has also been amended to define the EO units by a general formula found at p. 9, lines 14-21 of the PCT publication. Accordingly, no new matter is introduced with these amendments.

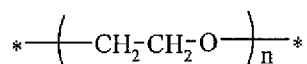
Reply to the Rejection of Claims 10-15, 17, 18 and 20 under 35 U.S.C. § 103(a)

Claims 10-15, 17, 18 and 20 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2002/0071811 to Bhatt *et al.* ("Bhatt") in view of U.S. Patent No. 6,335,003 to Kim *et al.* ("Kim"). For the following reasons, Applicants respectfully traverse the Examiner's rejection of claims 10-15, 17, 18 and 20 as being unpatentable over Bhatt in view of Kim.

Bhatt is directed towards aerosol and non-aerosol hair spray compositions containing hydrophilic, carboxylated polyurethane resins (p. 2, ¶ 0016; p. 3, ¶ 0030). The carboxylated polyurethane resin is produced by the reaction of (a) a polyoxyalkylene diol; (b) an alkylene glycol; (c) a diisocyanate; (d) water in an amount of about 0.001% to about 0.95% of the combined weight of the reactants; and (e) a 2,2-di(hydroxymethyl)alkanoic acid, wherein the ratio of NCO (isocyanate) groups to OH (hydroxyl) groups in the water, diol, and glycol mixture is about 0.4 to about 1.1 (p. 2, ¶ 0023; p. 3, ¶¶ 0034 and 0035; claim 1).

Bhatt teaches that an amine, such as diglycol amine, can be substituted for at least a portion of the water in the reaction mixture (p. 3, ¶ 0034; p. 4, ¶¶ 0036 and 0037; Polyurethane Resin W Example). However, Bhatt does not teach or suggest tertiary amines, and states that primary amines (monoethanol amine and/or diglycol amine) are preferred (p. 4, ¶ 0037). Therefore, Bhatt provides no motivation to one skilled in the art to seek use of tertiary amines.

Bhatt also does not teach or suggest amphoteric urethane resins having structural units derived from ethylene oxide, particularly those of the following formula –



wherein n is 20 to 120, as presently claimed.

Further, Bhatt does not teach or suggest hair spray compositions that include both a water-soluble resin and the amphoteric urethane resin having at least one carboxyl group and at least one tertiary amino group in one molecule (see, e.g., p. 12, ¶ 0120 of Bhatt providing examples of aerosol and non-aerosol hair spray compositions). More specifically, with reference to the presently claimed invention, Bhatt does not teach or suggest water soluble resins that improve the durability (see p. 26 of the present Specification) of a cosmetic composition, particularly in combination with an amphoteric resin.

Kim teaches cosmetic compositions containing cationic polyurethanes and polyureas. Kim is relied upon by the Examiner for its teachings of polyurethane resins wherein diamines and tertiary amines are taught as interchangeable, and therefore one skilled in the art would be motivated to substitute the diamines of Bhatt with the tertiary amines of Kim. Bhatt does not teach or suggest tertiary amines, and prefers primary amines, and therefore teaches away from seeking elsewhere (provides no motivation to look to another reference such as Kim) for substitutes for diamines (*i.e.*, tertiary amines).

Neither Bhatt nor Kim, alone or in combination, teach or suggest the presently claimed amphoteric urethane resins having structural units derived from ethylene oxide.

For at least all of the above reasons, neither Bhatt nor Kim, alone or in combination, teach or suggest the presently claimed composition, particularly the combination of the amphoteric resin having at least one carboxyl group and at least one tertiary amino group in one molecule and the water-soluble resin, and therefore cannot be said to render the present invention obvious.

It is believed that these remarks overcome the Examiner's rejection of claims 10-15, 17, 18 and 20 under 35 U.S.C. § 103(a). Withdrawal, therefore, of the rejection of these claims is respectfully requested.

Reply to the Rejection of Claims 11-13, 16 and 19 under 35 U.S.C. §103(a)

Claims 11-13, 16 and 19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Bhatt and Kim as applied to claims 10, 14, 15, 17, 18 and 20 above, and further in view of U.S. Patent No. 5,972,354 to de la Poterie *et al.* ("de la Poterie") and U.S. Patent No. 5,100,658 to Bolich *et al.* ("Bolich"). For the following reasons, Applicants respectfully traverse the

Examiner's rejection of claims 11-13, 16 and 19 as being unpatentable over Bhatt and Kim as applied to claims 10, 14, 15, 17, 18 and 20 above, and further in view of de la Poterie and Bolich.

Bhatt and Kim were discussed previously, those arguments being incorporated herein. de la Poterie is cited by the Examiner for its teaching of polyurethane copolymers comprising at least one silicone-containing block (col. 3, lines 16-28). de la Poterie does not teach or suggest amphoteric urethane resins having structural units derived from ethylene oxide as presently claimed. For at least these reasons, de la Poterie adds nothing to Bhatt and/or Kim. Even in combination, the references fail to teach the present invention.

Bolich is cited by the Examiner for teaching silicones in the form of resins as hair conditioners. Bolich does not teach or suggest amphoteric urethane resins having structural units derived from ethylene oxide as presently claimed. For at least these reasons, Bolich adds nothing to Bhatt and/or Kim.

It is believed that these remarks overcome the Examiner's rejection of claims 11-13, 16 and 19 under 35 U.S.C. § 103(a). Withdrawal, therefore, of the rejection of these claims is respectfully requested.

Based on the above amendments and remarks, allowance of the claims is believed to be in order, and such allowance is respectfully requested.

Respectfully submitted,

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